ECS Configuration Change Request

1. Originator	2. Log Date:	3. CCR #:	4. Rev:	5. Tel:	6. Rm #:	7. Dept.
John E. Rubenacker	**12/11/01**	**01-0921**	**—**	301-925-0828	2040A	SI&T

8. CCR Title: Update VDB for new Drop 6X test cases and criteria mappings

9. Originator Signature/Date	10. Class	11. Type:	12. Need Date: 12/12/01
John Rubenacker /s/ 12/4/01	**II**	**CCR**	

13. Office Manager Signature/Date	14. Category of Change:	15. Priority: (If "Emergency" fill in Block 27).
Robert Kniffin /s/ 12/4/01	VDB	Routine

16. Documentation/Drawings Impacted:	17. Schedule Impact:	18. CI(s) Affected:
Verification Database (VDB)	None	None

19. Release Affected by this Change:	20. Date due to Customer:	21. Estimated Cost:
6A		None - Under 100K

22. Source Reference: ☐**NCR (attach)** ☐**Action Item** ☒**Tech Ref.** ☐**GSFC** ☐**Other:**
ECS PI SE-1-023 requires that the VDB be updated with test case definitions and associated criteria mappings.

23. Problem: (use additional Sheets if necessary)
- Four new test cases in Drop 6X have been identified to verify some criteria for Drop 6X and 6B.
  -- The new test cases are currently not in the VDB; this CCR adds them to the VDB.
- One criterion for Drop 6A and additional criteria for Drop 6X and 6B have not yet been mapped to test cases; this CCR maps these criteria to the test cases identified.

24. Proposed Solution: (use additional sheets if necessary)
- Add the test cases specified in the attached "Test Case Additions (Drop 6X)" table to the VDB.
- Include the mappings specified in the attached "Criteria to Test Case Mapping (Drop 6X)" table in the VDB.
(Note: Since there has been some transfer of functionality among ECS Drops, the "Test Case Drop" field in the "Test Case Additions (Drop 6X)" table does not always coincide with the drop that applies to the criteria, ticket, and Test Case Id.)

25. Alternate Solution: (use additional sheets if necessary)
N/A

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
- New Drop 6X test cases would not be included in the VDB.
- VDB would indicate orphan criteria for Drop 6A, 6X, and 6B, i.e., criteria without any test case mappings.
- Failure to make these changes will result in a totally inaccurate portrayal of Drop 6A, 6X, and 6B criteria status.

27. Justification for Emergency (If Block 15 is "Emergency"):

28. Site(s) Affected: ☐EDF ☐PVC ☐VATC ☐EDC ☐GSFC ☐LaRC ☐NSIDC ☐SMC ☐AK ☐JPL ☐EOC ☐IDG Test Cell ☐Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. EDF/SCDV CCB Chair (Sign/Date): **Byron V. Peters /s/ 12/12/01**	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB
33. M&O CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
34. ECS CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS

Test Case Id	Test Case Title	Test Case Type	Test Case Drop
6X08010	Firewall	AT	6X
6P09060	Ingest of Aura and SORCE Instrument Data Types	AT	6X
6P09070	Ingest of DAS Data Types	AT	6X
6P10040	Results Set Chunking	AT	6X

Criteria Key	Ticket Id	Criteria Id	Criteria Statement	Criteria Type	Test Case Id	Test Case Title	Test Key
1749	EN_6A_01	51	Demonstrate that the Ingest tape processing can detect and respond to the following errors with a short PMPAN message: Incorrect number of metadata files.	EC	6A09000	IGS Tape Ingest	1943
1979	RM_6X_01	10	Using an LPS simulator outside the firewall, ingest an L7 subinterval. Verify that the granule is correctly inserted and that the tcp/ip message traffic for exchanging requests and acknowledgments takes place. Repeat this test from a different host outside the firewall, simulating a non-LPS host, and verify that it is not possible to kick of an Ingest. This test exercises tcp/ip socket connections (in and out) and ftp connections (out) through the firewall.	FC	6X08010	Firewall	
1980	RM_6X_01	20	Submit an order for several L7 scenes for ftp push and ftp pull from the V0 EDG Client (or a test driver simulating V0 protocols) running outside the firewall. Operate a simulated DORRAN interface outside the firewall. Verify the following: 1. The scenes can be ordered without problems. 2. The simulated DORRAN interface receives the L7 orders and can loop back the orders for processing by ECS. 3. The scenes ordered via ftp push are delivered correctly. 4. The scenes ordered via ftp pull are staged on the ECS pull area. 5. The distribution notices are received on e-mail accounts outside the firewall. 6. The scenes that were staged on the ftp pull area can be pulled from several locations outside the firewall. This test exercises tcp/ip socket connections (in and out), ftp connections (in and out), and e-mail (out) through the firewall.	FC	6X08010	Firewall	

1981	RM_6X_01	30	Operate the JDT and GDS simulator outside the firewall, Use the JDT to submit a DAR and then query for DAR. Submit a standing production order for a higher level ASTER product for one of the found DAR. Verify the following: 1. The DAR can be submitted and is correctly received and acknowledged by the GDS simulator. 2. The DAR query can be submitted, is correctly received by the GDS simulator and the result is correctly displayed. 3. The standing order can be submitted and is correctly queued up by ECS. This test exercises http (in) and tcp/ip socket connections (in and out) through the firewall.	FC	6X08010	Firewall	
1982	RM_6X_01	40	Using a simulated EDOS outside the firewall, push a level-0 granule, PDR and signal file into the EDOS ingest directory. Verify that the granule is inserted into ECS correctly and that the acceptance notice is sent. Repeat the test trying to push form a different host. Verify that it is not possible to ftp to the EDOS ingest directory from that host. This test exercises ftp connections (in and out) through the firewall.	FC	6X08010	Firewall	
1983	RM_6X_01	50	Configure an ftp server outside the firewall for polling ingest for some ancillary data (this simulates, for example, the GSFC NOAA Data Link server). Deposit several granules in the polling directory and verify that they are inserted into ECS correctly. This test exercises ftp connections (out) through the firewall.	FC	6X08010	Firewall	
1984	RM_6X_01	60	Configure an ftp server/directory inside a second firewall for polling ingest from an INS inside the first firewall. Deposit several granules and their PDR in the polling directory. Verify that the granules are correctly ingested and inserted into ECS and that the acceptance notifications are sent. This test exercises ftp connections (in and out) through the firewalls, as would be used in cross-DAAC traffic.	FC	6X08010	Firewall	

1985	RM_6X_01	70	Configure an ftp server connected to the firewall via HiPPI for polling ingest. Deposit several granules and their PDR in the polling directory. Verify that the granules are correctly ingested and inserted into ECS and the acceptance notifications are sent. This test exercises ftp connections (out) and e-mail (out) through the firewall to a HiPPI connected server.	FC	6X08010	Firewall	
1986	RM_6X_01	80	Using the MTMGW, submit orders from outside the firewall. The orders must be for several granules for ftp push to a server connected to the firewall via HiPPI. Verify that the granules are pushed correctly and that the e-mail notifications are correctly received on e-mail accounts outside the firewall. Verify that attempts to submit MTMGW orders from another host are rejected. This test exercises ssh connections (in), ftp connections (out via HiPPI), and e-mail (out) through the firewall.	FC	6X08010	Firewall	
1987	RM_6X_01	100	From a mail account outside the firewall, submit an EDR via e-mail. Verify that the order is correctly received and handled by ECS. This test exercises e-mail (in).	FC	6X08010	Firewall	
1988	RM_6X_01	110	Using the V0 EDG (or a test driver simulating it) outside the firewall, submit a user registration. Verify that the user profile is correctly inserted at the user profile database configured as the 'SMC' and replicated to another user profile database operating behind a second firewall simulating a remote DAAC. This test exercises tcp/ip connections (in) and Sybase replication through the firewall.	FC	6X08010	Firewall	
1989	RM_6X_01	120	Connect a platform inside the firewall to an external time provider outside the firewall. Verify that the external time service is used by the platform. This test exercises the ntp protocol through the firewall.	FC	6X08010	Firewall	
1990	RM_6X_01	130	From an account outside the firewall, send e-mail messages to an (M&O) account inside the firewall (e.g., subscription requests). Verify that the e-mail is received correctly. This test exercises e-mail (in) through the firewall.	FC	6X08010	Firewall	

1991	RM_6X_01	140	From inside the firewall, access a web server located outside the firewall (e.g., at another DAAC). Verify that the web access is possible. Repeat the test from a platform not authorized for external web access. Verify that the access is not possible. This test exercises http (out) through the firewall.	FC	6X08010	Firewall	
1992	RM_6X_01	145	From inside the firewall, use the ECS scripts for accessing the Naval Observatory to obtain a new lea second file. This test exercises anonymous ftp (out) through the firewall.	FC	6X08010	Firewall	
1993	RM_6X_01	150	Configure ftp and secure shell capabilities on a host inside the DAAC that is not supposed to be accessible from outside the firewall. Verify that attempts from outside the firewall to connect to this host via ftp, or secure shell or ping fail	EC	6X08010	Firewall	
1975	RH_6B_03	10	Verify that the system can ingest and archive the following MLS data types: ML1ENG, ML1LOG, ML1OA, ML1RADD, ML1RADF, ML2BRO, ML2CLO, ML2CO, ML2DGG, ML2DGM, ML2Z, ML2SH2O, ML2HCL, ML2HCN, ML2HNO3, ML2HO2, ML2HOCL, ML2ICE, ML2LOG, ML2N2O, ML2O3, ML2OH, ML2OTH, ML2RHI, ML2SO2, ML2T, ML3DCLO, ML3DCO, ML3DZ, ML3DH2O, ML3DHCL, ML3DHCN, ML3DHNO3, ML3DICE, ML3DN2O, ML3DO3, ML3DOH, ML3DRHI, ML3DT, ML3DZMD, ML3DZMS, ML3LOG, ML3MMAP, ML3MZMD, ML3MZMS	FC	6P09060	Ingest of Aura and SORCE Instrument Data Types	
1976	RH_6B_03	20	Verify that the system can ingest and archive the following TES data types: TL1BL, TL1BN, TL2ATMTL, TL2ATMTN, TL2CH4L, TL2CH4N, TL2COL, TL2CON, TL2H2OL, TL2H2ON, TL2HNO3L, TL2NO2L, TL2NOL, TL2O3L, TL2O3N, TL3ATMTL, TL3ATMTN, TL3CH4L, TL3CH4N, TL3COL, TL3CON, TL3H2OL, TL3H2ON, TL3HNO3L, TL3NO2L, TL3NOL, TL3O3L, TL3O3N	FC	6P09060	Ingest of Aura and SORCE Instrument Data Types	
1977	RH_6B_03	30	Verify that the system can ingest and archive the following HIRDLS data types: HIR1DRV, HIR2APR, HIR2BRWS, HIR2CFG, HIR2CLDS, HIR2CLIM, HIR2CTRL, HIR2INST, HIR2LOG, HIR2QA, HIR2TRA, HIR3CFG, HIRDLS1, HIRDLS2, HIRDLS3	FC	6P09060	Ingest of Aura and SORCE Instrument Data Types	

1978	RH_6B_03	40	Verify that the system can ingest and archive the following SORCE spacecraft data types: SORL0TLM, SOR3TSID, SOR3TSI6, SOR3SSID, SOR3SSI6, SOR41NMD, SOR41NM6	FC	6P09060	Ingest of Aura and SORCE Instrument Data Types	
1936	RH_6B_02	40	Verify that the system can ingest and archive the following DAS data types: DREAPCHM, DREAPCLD, DREAPMIS, DREAPMOM, DREAPMST, DREAPTMP, DREAPTRP, DREAXCHM, DREAXCLD, DREAXENG, DREAXLSM, DREAXMIS, DREAXSTR.	FC	6P09070	Ingest of DAS Data Types	
1887	EN_6B_03	10	Using the V0 EDG client or a test driver simulating V0 protocols, perform an inventory search specifying that all metadata attributes are to be returned in the search results. Set up the test case such that the inventory search results contain more granules than the SDSRV default chunk size. Also, let V0 GTWAY pass to the SDSRV a chunk size smaller than the SDSRV default chunk size. Verify correct search results are returned to the V0 EDG client or the test driver. Verify the search results are returned in multiple chunks from the SDSRV to the V0 GTWAY using the chunk size specified by the V0 GTWAY. Repeat the above inventory search test with the V0 GTWAY passing a chunk size larger than the SDSRV default chunk size. Verify the search results are returned using the SDSRV default chunk size.	FC	6P10040	Results Set Chunking	
1888	EN_6B_03	20	Using the V0 EDG client or a test driver simulating V0 protocols, perform an inventory search. Set up the test case such that the inventory search results contain a fairly small amount of data, that fits within a single data chunk. Verify correct search results are returned to the V0 EDG client or the test driver. Verify the search results are returned in a single chunk from the SDSRV to the V0 GTWAY.	FC	6P10040	Results Set Chunking	
1890	EN_6B_03	40	Using a test driver simulating SIPS, perform an inventory search through the MTMGW. Verify the correct search results are returned. Verify the search results are returned from the SDSRV to the MTMGW in one or more data chunks using the default chunk size configured in the SDSRV.	FC	6P10040	Results Set Chunking	

1891	EN_6B_03	50	Perform multiple concurrent inventory searches from the following clients: 1. one or more V0 EDG client sessions or test drivers simulating V0 protocols 2. a test driver simulating the SIPS client. Verify the search results are returned to each V0 EDG client or test driver using proper data chunking. Verify the search results are returned from the SDSRV to the MTMGW using the default chunk size configured in the SDSRV.	FC	6P10040	Results Set Chunking	
1892	EN_6B_03	60	Using the V0 EDG client or a test driver simulating V0 protocols, perform an inventory search specifying that only a subset of the metadata attributes are to be returned in the search results. Design the test such that the search results contain more granules than the SDSRV default chunk size. Also, let V0 GTWAY pass to the SDSRV a chunk size smaller than the SDSRV default chunk size. Verify correct search results are returned to the V0 EDG client or the test driver. Verify the search results are returned in multiple chunks from the SDSRV to the V0 GTWAY using the chunk size specified by the V0 GTWAY. Repeat the above inventory search test with the V0 GTWAY passing a chunk size larger than the SDSRV default chunk size. Verify the search results are returned using the SDSRV default chunk size.	FC	6P10040	Results Set Chunking	
1893	EN_6B_03	70	Using the V0 EDG client or a test driver simulating V0 protocols, perform an inventory search. Design the test such that the SDSRV fails during the inventory results set chunking. Set up the test case such that the inventory search results contain more granules than the SDSRV default chunk size. Shutdown the V0 GTWAY connection to the SDSRV after the first chunk is returned from the SDSRV. Verify that the V0 GTWAY returns an error message to the V0 EDG client (or test driver) using V0 protocols.	EC	6P10040	Results Set Chunking	